

3

Eating for Optimal Health and Fitness

In this chapter you will learn about:

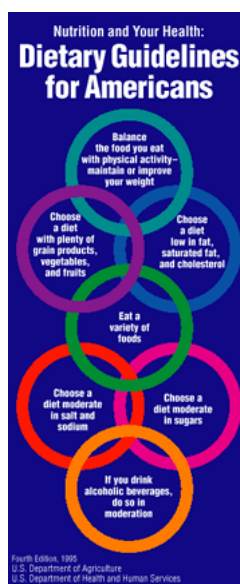
- ◆ Dietary Guidelines.
- ◆ The Food Guide Pyramid.
- ◆ Food labels.
- ◆ Nutrient-dense foods.
- ◆ Vegetarian diets.
- ◆ Eating out wisely.

You have heard the saying “You are what you eat”. That is because what you eat makes a difference in how you perform, how you feel, and affects your long-term health. This chapter provides information on how to follow healthy dietary practices whether you are eating at home, in a galley, or at a restaurant.

Dietary Guidelines for Americans

The US Department of Agriculture (USDA) and the Department of Health and Human Services (DHHS) prepared Dietary Guidelines for all Americans 2 years of age and older. (<http://www.nal.usda.gov/fnic/dga>). The seven guidelines are:

1. Eat a variety of foods.
2. Balance the food you eat with physical activity - maintain or improve your weight.
3. Choose a diet with plenty of grain products, vegetables, and fruits.
4. Choose a diet low in fat, saturated fat and cholesterol.
5. Choose a diet moderate in sugars.
6. Choose a diet moderate in salt and sodium.
7. If you drink alcoholic beverages, do so in moderation.

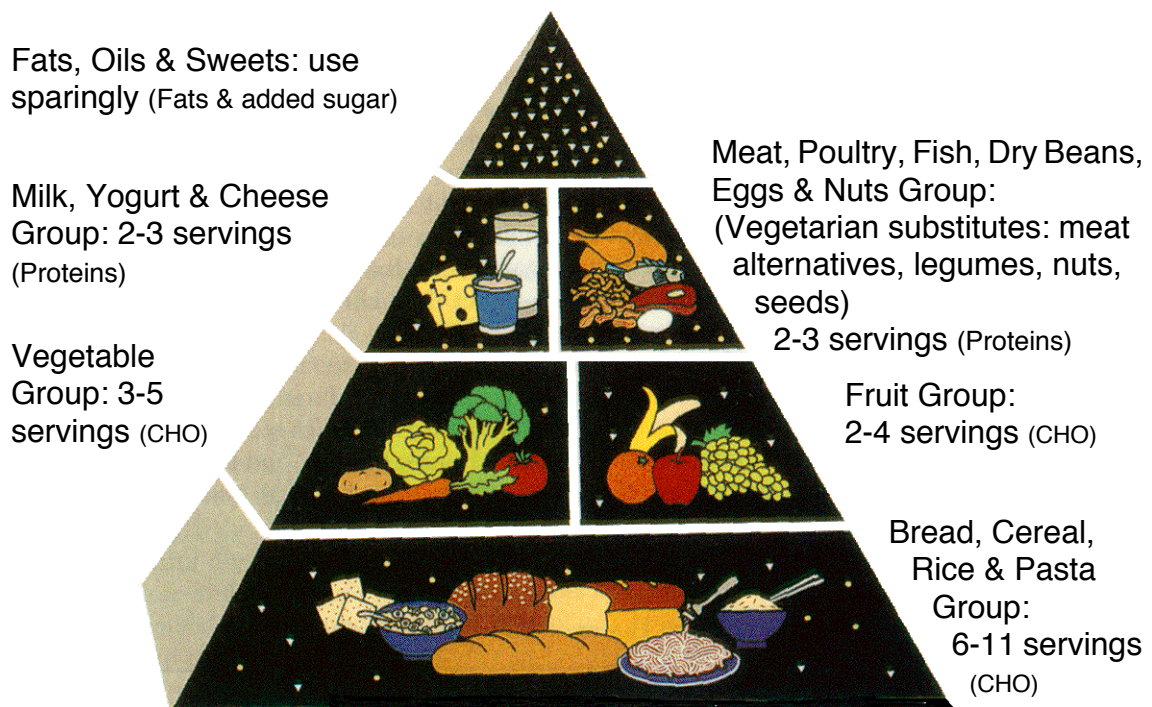


For more specific guidance on food selection, the USDA and the DHHS developed the food guide pyramid in [Figure 3-1](#).

The Food Guide Pyramid

You must have noticed the food guide pyramid on food labels. The USDA and the DHHS designed this pyramid to be a flexible dietary guide for Americans. Each compartment contains a different food group and the recommended number of servings that should be consumed daily. The primary energy-providing nutrient ([Chapter 2](#)) found in each food group is written in parenthesis. See [Figure 3-1](#).

Figure 3-1. Food Guide Pyramid



Although this Food Guide Pyramid is found on most food labels, many people are unsure how to use its information. The most common questions are about serving sizes and how many servings should be eaten. Often people overestimate the size of a serving, thereby eating more kcals than they anticipated. [Table 3-1](#) gives an estimate of the amount of food per serving for each food group and [Table 3-2](#) lists the number of servings required from each food group to meet the various total daily kcals shown in the left column. Look up the number of servings you need from each of the food groups to meet your Estimated Energy Requirements (EER, [Worksheet 1-2](#)).

Table 3-1. Portion Sizes Equivalent to a Serving

Food Group	Serving Size
Bread, Cereal, Rice, Pasta & Grains	1 slice of bread, 1/2 cup cooked rice or pasta, 1 oz.* breakfast cereal, 1/2 bagel.
Vegetables	1 cup leafy vegetables, 1/2 cup raw or cooked vegetable, 3/4 cup vegetable juice.
Fruits	1 medium size fruit, 1/2 cup canned fruit, 3/4 cup of 100% fruit juice, 1/4 cup dried fruit.
Milk, Yogurt, & Cheese	1 cup milk or yogurt, 2 oz. cheese.
Meat, Poultry, Fish, Dry Beans, Eggs, Nuts	3 oz. lean meat, poultry, fish, 1 egg, 2 Tbsp* peanut butter, 1/2 cup cooked beans.
Fats, Oils, Sweets	1 tsp* oil, 1 pat of butter, 1 Tbsp salad dressing or sour cream.

*oz. = ounces, Tbsp. = tablespoon, tsp = teaspoon.

Table 3-2. Suggested Servings Based on Total Daily Caloric Intake

Total Daily Kcals	NUMBER OF SERVINGS PER FOOD GROUP					
	Bread	Vegetables	Fruits	Meats	Milk	Fat grams
1,400	6	4	3	2	2	<47
1,600	7	5	4	2	2	≤53
1,800	8	5	4	2	3	≤60
2,000	10	5	4	2	3	≤67
2,200	11	5	4	3	3	≤73
2,400	12	6	5	3	3	≤80
3,000	15	6	6	3	3	≤100

Adapted from *Navy Nutrition and Weight Control Self-Study Guide*, NAVPERS 15602A 1996, p. 44.

5-A-Day

You may have heard of the national campaign to increase the amount of fruits and vegetables eaten by all Americans. This campaign, called “5-a-Day” has been adopted by all military services. Its purpose is to encourage people to eat at least five servings of fruits and vegetables each day. Following this program can add needed vitamins and minerals to your daily food intake; cut your risk of heart disease, cancer and digestive diseases; help control cholesterol; prevent constipation; and can help manage your body weight and percent body fat. Additionally, many fruits and vegetables contain “antioxidants” (see [Glossary](#)) and other nutrients that can be beneficial to your health. Some ideas to incorporate more fruits and vegetables in your diet can be found in [Appendix A](#).



Food Labels

To fully understand and use the information in the Food Guide Pyramid you need to understand how to read nutrition labels on foods. An example of a food label is shown in [Figure 3-2](#).

Figure 3-2. How to Read a Food Label

Serving size reflects the typical amount of the food that many people eat.

The list of nutrients displays the amount in one serving of the food.

Ingredients are listed from the most to the least abundant items found in the food.

Nutrition Facts
Serving Size 8 fl oz (240 ml)
Servings Per Container 8

Amount Per Serving	
Calories	100
Calories from Fat 20	
% Daily Value*	
Total Fat	2.5g 4%
Saturated Fat	1.5g 8%
Cholesterol	10mg 3%
Sodium	130mg 5%
Total Carbohydrate	12g 4%
Dietary Fiber	0g 0%
Sugars	11g
Protein	8g
Vitamin A	10%
Calcium	30%
Vitamin C	4%
Iron	0%
Vitamin D	25%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: Lowfat milk, Vitamin A palmitate, Vitamin D₃

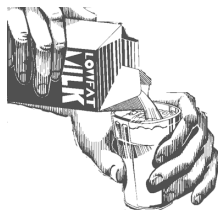
The % Daily Values are based on a 2,000 kcal diet. Use the number to compare the amount of nutrients found in various foods.

Percentage of the daily vitamin and mineral recommendation that is met in one serving of the food.

Selecting Nutrient-Dense Foods

Foods that contain the most nutrients in the fewest kcals are called **nutrient-dense foods**. Now that you know the number of kcals and importance of all the nutrients, can you select foods that provide many nutrients without consuming too many kcals? Let us equate this concept to bargain shopping. If you have \$10 and you need to buy several toiletries, you will buy the products that cost the least money yet still meet your needs. The same should be true with respect to the amount of kcals in the foods you eat. For example, compare the nutritional content of skim milk and whole milk.

	Skim Milk	Whole Milk
Total kcal	85	157
grams CHO	12	11
grams proteins	8	8
grams fat	0	9
mg Calcium	303	290



Skim milk and whole milk contain the same amounts of proteins, CHO, and calcium; however, skim milk has less total kcals and less fat than the whole milk. Therefore, you can drink two glasses of skim milk for the same amount of kcals as 1 glass of whole milk, yet you will get twice the proteins, CHO, and calcium.

The goal of selecting nutrient-dense foods is not to avoid fat grams, but rather to select foods that contain the essential nutrients without eating an overabundance of kcals.

Vegetarian Diets

The popularity of vegetarian diets has increased in recent years. One reason is that vegetarian diets have been linked to lower risks for several diseases, including heart disease, high blood pressure, and diabetes. There are many different types of vegetarian diets. The similarities among them lie in their emphasis on grains, vegetables, fruits, beans, and nuts to obtain all the necessary nutrients. The main concern people have when deciding to try a vegetarian diet is whether the diets will meet their vitamin, mineral, and protein needs. These needs can be met if vegetarians include foods from all the food groups in the pyramid. Meat, fish and poultry can be substituted with legumes, nuts, seeds, and other meat alternatives. Strict vegetarians who omit animal products from their diets may need to take Vitamin B₁₂ and calcium supplements.

Eating Out

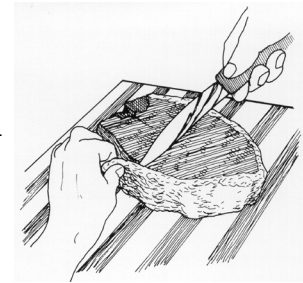
On many occasions you may find yourself eating away from home. Following the dietary guidelines when dining out is a very important aspect of optimizing your health, fitness, and performance.



*On average,
Americans eat 1 of 3
meals away from
home each day.*

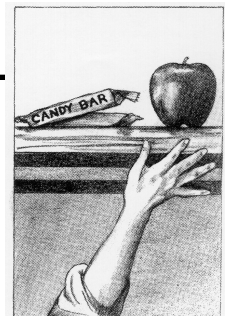
Tips for Eating Out

- ◆ Order foods high in complex CHO (see [Chapter 2, page 7](#)).
- ◆ Choose foods that are baked, broiled, steamed, poached, smoked, roasted, grilled, flame-cooked, or marinara.
- ◆ Order sauces and dressings “on the side.”
- ◆ Trim all visible fat off the meat.
- ◆ Order a salad as your appetizer.
- ◆ Order dessert after you have eaten your main course and only if you are still hungry.
- ◆ Limit alcohol consumption.
- ◆ Avoid foods that are fried, breaded, battered, flaky, crispy, creamy, au gratin, puffed, loaded, or tempura. Also, avoid hollandaise and bearnaise sauces.
- ◆ Many restaurants have a listing of the nutritional content of their foods available on request, even fast food restaurants. More information can be found at the USDA’s web site at:
<http://www.nal.usda.gov/fnic>.



Snacking

Many people think snacking is unhealthy and leads to weight gain because many people don't eat healthy snacks! If you enjoy snacking and you want to maintain your body weight and perform well, then selecting healthy snacks is critical. Think through a typical day. How often and where do you usually snack? Are your snacks healthy or loaded with extra kcals? Follow these tips to help promote healthy snacking! (Snacks should not replace a meal.)



- ◆ Choose foods such as fruits, vegetables, plain popcorn, dried fruits, whole grain crackers, pretzels, cereal snack mixes, unsweetened fruit juices, fresh produce, and low-fat yogurt.
- ◆ Snack on fresh fruits or vegetables with low-fat peanut butter or low-fat cheese spreads.
- ◆ If you must have candy, choose one that is high in CHO and as low in fat as possible.



Many people replace high-fat snacks with the low-fat alternatives in an attempt to lower their total fat intake. Be cautious, however, because even low-fat snacks can lead to weight gain and increases in body fat when too many kcals are consumed. Remember: low-fat does not mean low in kcals, so do not over eat!

Nutrition Throughout Life



The guidelines discussed in this chapter can be applied to everyone throughout their lifetime. Identify when your energy needs are changing (i.e., changes in physical activity levels, pregnancy, breast feeding) and adjust your diet appropriately to maintain your health and fitness. Each individual should eat the appropriate number of servings from each food group based on their EER (refer to [Chapter 1](#) and [Table 3-2](#)). Seek the help of a Registered Dietitian if you have any concerns about your diet or the diet of a family member. Even if you do not cook your meals or if you eat in the galley, you can make healthy food choices (see [Appendix A](#)). When eating in the galley, ask for the **Healthy Navy Options** menu items (available in the larger galleys and ships). Make high-fat foods the exception rather than the rule in your diet.

